ANNUAL REPORT

OF THE

Auckland Institute

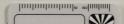
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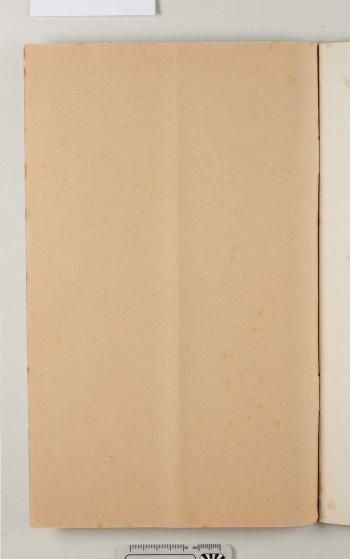
MUSEUM

For 1899-1900.

AUCKLAND:

THE BRETT PRINTING COMPANY, SHORTLAND AND FORT SIS.





ANNUAL REPORT

OF THE

Huckland Institute

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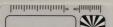
MUSEUM

For 1899-1900

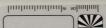
ADOPTED AT THE ANNUAL MEETING, HELD FEB. 19, 1900.

AUCKLAND:

THE BRETT PRINTING COMPANY, SHORTLAND AND FORT STREETS $$\frac{}{MDCCCC},$$







OFFICERS ~

OF THE

AUCKLAND INSTITUTE.

president :

PROF. H. W. SEGAR.

Vice=Presidents:

PROF. H. A. TALBOT-TUBBS. J. BATGER, Esq.

Council:

PEACOCK, T., Esq. BROWN, PROF. F. D. COOPER, C., Esq. PETRIE, D., Esq., F.L.S. EWINGTON, F. G., Esq. POND, J. A., Esq., F.C.S.

MACKECHNIE, E. A., Esq. STEWART, J., Esq., C.E.

MARSHALL, P., Esq., F.G.S. THOMAS, PROF. A. P., F. THOMAS, PROF. A. P., F.L.S. UPTON, J. H., Esq.

Trustees :

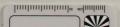
MACKECHNIE, E. A., Esq. PEACOCK, T., Esq. UPTON, J. H., Esq.

Secretary and Curator:

T. F. CHEESEMAN, Esq., F.L.S., F.Z.S.

Huditor :

W. GORRIE, Esq.



THE FOLLOWING ...

Magazines and Periodicals

ARE CIRCULATED AMONG THE MEMBERS :-

QUARTERLY JOURNAL OF MICROSCOPICAL SCIENCE

THE IBIS

NATURE

NATURAL SCIENCE

GEOLOGICAL MAGAZINE

LANCE!

SCIENCE PROGRESS

BOTANICAL MAGAZINE

ANNALS OF BOTANY

GARDENERS' CHRONICLE

CHRMICAL NEWS

ENGINEERING

SCIENCE GOSSIP

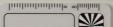
ELECTRICAL AND TELEGRAPHIC REVIEW

ANNALS AND MAGAZINE OF NATURAL HISTORY

THE PHILOSOPHICAL MAGAZINE

AMERICAN JOURNAL OF SCIENCE

THE NEW ZEALAND MEDICAL JOURNAL.



5

Report of the Council.

As provided for by the Rules, the Council have now to submit to the members their Thirty-second Annual Report on the financial and general condition of the Institute, and its progress during the past year.

Members.—Five new members have been elected during the year, a number considerably below the average. On the other hand, fifteen names have been withdrawn from the roll—two from death, five from resignation, and eight from non-payment of subscription for more than two consecutive years. There is thus a net decrease of ten; the total number of members at the present time being 153. The Council regret to announce the death of Lieut.-Col. T. L. Murray, who has been connected with the Institute for more than twenty years, and during the whole of that period has taken a steady and consistent interest in its affairs. For the last two years he has served as a member of the Council.

Finance.—Full details of the financial position of the Institute will be found in the balance-sheets appended to the report; but the following brief synopsis will no doubt be use-The total revenue of the working account, excluding the balance of £84 4s. 9d. brought from the previous year, has been £900 18s. 2d. Last year the amount was £899 2s. 10d., very nearly the same sum. Examining the separate items of the balance-sheet, it will be seen that the receipts from the invested funds of the Costley Bequest have been £328 5s., against £365 16s. 3d. for 1898-99; the reduction being mainly due to a temporary delay in the payment of interest on one of the investments. The Museum Endowment has yielded £444 1s. 4d., the amount for the previous year being £355; while the sum received for members' subscriptions stands at £118 13s., showing a reduction of £9 9s. The total expenditure has been £923 16s. 10d., leaving a balance of £61 6s. 1d. in the Bank of New Zealand. The Council have no change to report respecting the invested funds of the Institute, the amount being the same as last year, £13,590. It has been found necessary, however,

to renew some of the smaller investments at a reduced rate of interest, and one or two mortgages have been paid off; the funds now waiting re-investment.

Museum Endowment.—There is little to report under this head. The interest on the capital sum invested has been regularly paid, and the Crown Lands Board have, from time to time, handed over the rents received from those endowments which are leased. There still remain many allotments in country townships from which no revenue is derived. Attempts have been made to dispose of these by public auction, but so far without success. It is also a matter for regret that the mining leases taken up on the Waikanae Endowment have been abandoned as unremunerative, thus cutting off the special income received during the last two or three years from that source.

Trustees.—At the close of the year Mr. Percy Smith resigned his position as one of the Trustees of the Institute, after holding it for fifteen years. The Council are anxious to put on record their appreciation of Mr. Smith's long-continued services, and of the careful attention that he has always given to the affairs of the Institute. It is pleasing to know that his name still remains on the roll of the Institute, and though no longer serving it in an official capacity, he still has the intention of assisting in its work whenever opportunity occurs. It is proposed to fill the vacancy caused by his resignation at a Special Meeting to be held prior to the Annual Meeting.

Meetings.—Nine meetings have been held during the year, at which the following papers were read:—

- 1 Introductory Address:—By the President, J. Batger, Esq.
- 2 The Electric Spark:—By Prof. F. D. Brown.
- 3. Water Supply and Disease Germs:—By R. H. Makgill, M.D.
- 4. Ruapehu and its Neighbourhood:—By P. Marshall, F.G.S.
- 5. Geology of Castle Hill, Coromandel:—By J. M. Maclaren
- 6. The Coming Star Showers:—By Prof. H. W. Segar.
- 7. The Novel:—By Prof. C. H. Egerton.
- On the Percentage of Chlorine in the Waters of Lake Takapuna:—By J. A. Pond, F.C.S.
- 9. Some Experiments in Radiant Heat:-By E. V. MILLER.
- Rarotonga—Its Scenery, Vegetation, and Native Inhabitants:—By T. F. CHEESEMAN, F.L.S.
- 11. The Composition of the Soil of the Taupo Plains, and its

Suitability for the Growth of Grasses:—By J. A. Pond, F.C.S., and J. S. Maclaurin, D.Sc., F.C.S.

12. Maori Origins:-By Elsdon Best.

Several of the above papers have been forwarded to Wellington, with the view of insertion in the next volume of "Transactions," Colume 31 of the "Transactions," containing the papers read before the affiliated Societies during the year 1898, was not received for distribution until the last week in 1899, although bearing the date "June, 1899" on the title page. It is to be hoped that the Board of Governors will make arrangements under which future volumes may be more promptly issued, for any delay or irregularity in their appearance is much to be deprecated. Authors will hesitate before submitting important memoirs to a Society which may retain them for nearly two years before publication.

Museum.—The Museum has been open to the public throughout the year, with the exception of a few days devoted to cleaning and re-arrangement. The hours of admission have remained, as before, from 10 a.m. to 5 p.m. on week-days, and from 2 to 5 p.m. on Sundays. The attendance has been large, but not quite equal to that of the previous year. The register kept by the janitor shows that 13,230 people entered the building on Sundays, being an average of 254 for each Sunday. On the eight chief holidays the attendance was 2,302, or an average of 288. On week-days the visitors can only be occasionally counted, but the average attendance cannot be far from 110. The approximate number of week-day visitors would therefore be 33,550, and the total for the whole year 49,082. Last year the number was 51,641.

The chief progress made by the Museum has been in the Ethnographical department. Mr. Elsdon Best, of Ruatahuna, has forwarded a second collection made by him among the Maoris living near Lake Waikare-moana, which contains several articles not previously represented in the Museum. A beautiful "Toki-Hohoupu," or battle-axe, with elaborately carved wooden handle of great age and perfect preservation, has been obtained by purchase, together with several rare bone and greenstone ornaments. During a visit to Rarotonga, the Curator collected a series of 132 articles, illustrating the ethnology of that island; and through the kind offices of the Rev. Mr. Cullen, seconded by Colonel Gudgeon, two of the celebrated carved ceremonial axes from Mangaia have been secured. An interesting exchange has been received from the Bishop Museum at Honolulu, in the shape of two of the rare kahilis.

or wands, elaborately decorated with feather work. Through the kind co-operation of Mr. W. S. Laurie, of this city, a very acceptable collection of mound-builders' pottery from the Mississippi Valley has been obtained from Dr. Bushnell, of St. Louis. There have also been some minor additions, which it is

impossible to mention here.

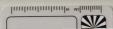
In the Zoological department the most noteworthy accession has been an almost perfect moa skeleton, purchased from Mr. Kingsley, of Nelson. It has a special value from being the type of Captain Hutton's new species Dinornis torsous. Two remarkably good mounted specimens of Echidna and Ornithorhynchus have been presented by Mrs. Calder, of this city; and several rare New Zealand bird skins have been purchased. The want of a resident taxidermist is severely felt in this branch of the Museum, and until the funds of the Institute are sufficient to allow of the engagement of one, little more can be done than to keep in good condition the specimens at present exhibited, and to pack away all additions as they arrive. The Council much regret that they have been unable to arrange for the preparation of the large groups of mammals intended to occupy the centre of the main hall—an addition which more than any other would enhance the appearance of the Museum, and add to its value as a means of recreation to the general public.

Among the miscellaneous additions special mention should be made of a valuable timber exhibit presented by the Leyland O'Brien Timber Co. It consists of a complete section of a kauri tree six feet in diameter, supporting a framework containing panels of the chief ornamental woods of the Colony. It affords an excellent illustration of the value of our timber trees for

furniture or decorative wood-work.

Library.—Few additions have been made to the Library during the year, but the Council have recently authorised the purchase of an instalment of books, which, it is hoped, will arrive before the commencement of the approaching session. The usual exchanges and presentations from foreign libraries and institutions have been received, the noteworthy addition being a complete set of the publications of the United States Bureau of Ethnology, in 16 vols, quarto. The scientific magazines and periodicals subscribed to by the Institute, a list of which will be found on another page, have been regularly received, and have been to some extent circulated amongst the members.

Little Barrier Island.—The management of the Little Barrier Island as a reserve for the preservation of the avifauna of New Zealand still remains in the hands of the Institute, the



9

Government contributing an annual grant of £200 to cover the expenses in connection with it. The Curator, Mr. Shakespear, reports that matters are in a satisfactory condition on the island, and that most of the native birds appear to be increasing in numbers now that they are not in any way molested. A short time ago he detected two men at work on the island gum-digging. He at once turned them off, and reported the occurrence. It is the intention of the Crown Lands Department to proceed against the men as soon as they can be found. With this exception no attempt has been made to land apon the island or interfere with it in any way.

In concluding the Report, the Council invite the active assistance of the members and general public in furthering the objects of the Institute, either by contributing papers to be read at the meetings, by adding to the Library or Museum, or in any other way that may seem advisable. They feel sure that in the future, as in the past, a liberal support will be given to an institution whose chief aim is to secure the advancement of knowledge, and the diffusion of scientific and practical information throughout the community.



The Treasurer in Account with the Auckland Institute and Museum Trust Board,

FEBRUARY 22, 1899, TO FEBRUARY 15, 1900.

			£	S.	d.			£	S.	d.	
Balance in Bank of New Zealand, Fe	b. 22, 1899		84	4	9	Books, Periodicals, Binding		67	18	10	
Annual Subscriptions			118	13	0	Additions to Museum		67	4	6	
Interest from Costley Bequest			328	5	0	Museum Requisites		25	11	2	
Rents and Interest transferred from	Museum	En-				Repairs to Buildings, Fittings		15	14	3	
dowment Account			444	1	4	Printing. Advertising, Insurance, Gas, Cleanin	g,				
Interest from Nathan Bequest			5	0	0	Stationery, Postages, and other expenses	0'	113	16	5	
Interest from Life Subscription Accord	ant		4	18	10	Salaries		463	7	6	
						Land Tax					10
						Miscellaneous Payments			2		
						Paid to Investment Account in reduction of Lo					
						for erection of Statue Hall		113	7	0	
						Balance in Bank of New Zealand, Feb. 15, 1900		61			
						Daniel II Danie of 110 ii Zeannia, 2 co. 10, 1000		01	U		
			£985	2	11			£985	0	11	
		-					-	× 030	4	1.4	

Examined and found correct,

T. F. CHEESEMAN,

Treasurer.

W. GORRIE,

W. GORRIE,

February 15, 1900.

Auditor.

The Treasurer in Account with the Auckland Institute and Museum Trust Board,

FEBRUARY 22, 1899, TO FEBRUARY 15, 1900.

MUSEUM ENDOWMENT ACCOUNT.

Balance in Bank of New Zeak Sales of Endowments Rents of Endowments Interest on Investments	and, Feb. 22, 1899 	£ s. d 4 9 8 22 9 6 195 16 7 243 5 6	Insurance, Rates, Agency Balance in Bank of New Zealand, Feb. 15, 1900	444 17	4 15	4 5 0
	1	£ s. d.	RIER ACCOUNT.	£	S.	d.
Government Grant for 1899		200 0 0		20	18	4
Government Grant for 1900		200/ 0 (0	0
			Miscellaneous Payments	27	7	3
			Balance in Bank of New Zealand, Feb. 15, 1900	201	14	5
		£400 0 (£400	0	0

Examined and found correct,

February 15, 1900.

W. GORRIE, Auditor.

T. F. CHEESEMAN, Treasurer.

Investments of the Auckland Institute.

I.-COSTLEY BEQUEST.

On Mortgage on Freehold Security, at 5 % ... 4,000 0 0 at 6 % ... at 5 % ... at 5 % ... 1,500 0 0 950 0 0 500 0 0 Balance of Loan for Erection of Statue Hall... 700 0 0 Waiting Investment 50 0 0 Total of Costley Bequest at Interest ... Invested in Real Property, Site of Museum ... 2.500 0 0 Expended in Erection of Ethnological Hall ... 1,500 0 0 Expended in Show Cases and other Fittings ... 450 0 0 4,450 0 0 Grand Total of Costley Bequest 12,150 0 0 II.-MUSEUM ENDOWMENT. On Mortgage on Freehold Security, at $4\frac{1}{2}$ % ... 3,200 0 0 650 0 0 at 6 % ... at 5½ % ... 450 0 0 at 5 % ... 250 0 0 Balance of Newmarket Property, say 404 10 0 Waiting Investment 660 10 0 5,615 0 0 III.-NATHAN BEQUEST. Waiting Investment 100 0 0 IV .- LIFE SUBSCRIPTION ACCOUNT. On Mortgage on Freehold Security, at 5 % ... 150 0 0 Deposited in Auckland Savings Bank 25 0 0 175 0 0 Total £18,040 0 0 Proportion available for Interest £13,590 0 0 T. F. CHEESEMAN, Documents and Securities examined and found in order. W. GORRIE, Auditor. February 15, 1900.

ADDITIONS and DONATIONS

TO THE

Library and Museum.

Parliamentary Papers and Reports; New Zealand Hansard for 1899; New Zealand Statistics; New Zealand Official Year Book.—The New Zealand Government.

Transactions of the New Zealand Institute, vol. 31; Hamilton's Maori Art, part 4; 33rd Annual Report of the Colonial Laboratory,—The Manager of the New Zealand Institute.

Journal of the Polynesian Society, vol. 8.—The Society.

Publications of the Department of Mines, New South Wales, for 1898-99.

—The Department.

Journal of the Linnean Society of New South Wales, vol. 25.—The Society.

Report of the Australasian Association for 1898.—The Association.

Various publications of the Department of Agriculture, New South Wales.—The Department.

Journal and Proceedings of the Royal Society of New South Wales, vol. 32.—The Society.

Science of Man for 1899.—The Editor.

The Wombat, vol. 5.—The Editor.

Catalogue of the Australian Tunicata, by Prof. Herdman.—The Australian Museum.

United States Consular Reports.—The Secretary of State, United States.

Webster's Chineh Bug: Proceedings of the 10th Meeting of Economic Entomologists; Miscellaneous Results of the Work of the Division of Entomology; Chittenden's Insects injurious to Garden and Orchard Crops; Proceedings of the 11th Annual Meeting of Economic Entomologists; Hopkins on the Insect Enemies of Porests in the North West; Carleton's Cereal Rusts of the United States; Smith's Well Disease of Cotton, etc.; Knapp's Rice Culture in the United States; Year-book of the Department of Agriculture, U.S.A.

Annual Report of the Missouri Botanical Gardens .- The Director.

Annual Report of the Museum of Comparative Zoology, Harvard.—The Director.

Bulletin of the American Museum of Natural History for 1898; Memoirs, vols. 1 and 2.—The Museum.

Bulletin of the U.S. National Museum, vols. 19 and 20; Report for 1896.
—The U.S. National Museum.

Proceedings of the American Association for 1891, 1897, 1898.—The Association.

Transactions of the Wisconsin Academy of Sciences, vol. 11.—The Academy.

Complete set of the Annual Reports of the Department of Ethnology, United States, 17 vols., quarto,—The Department.

Annual Report of the Smithsonian Institution for 1896; Bendire's Life Histories of American Birds.—The Smithsonian Institution.

Annals of the Astronomical Observatory, Harvard, vol. 42.—The Observatory.

Report of the Agricultural Experimental Station of California for 1895 97.—The University of California.

Nineteenth Annual Report of the Natural History Survey of Minnesota.

—The Survey.

Annual Report of the Field Columbian Museum; Studies in the Herbarium, vol. 1.—The Field Columbian Museum.

Report of the Chicago Academy of Sciences for 1897; the Pleistocene Deposits of the Chicago Area.—The Academy of Sciences, Chicago.

Report of the Geological Survey of Canada for 1897; Contributions to Canadian Palæontology, vol. 4, part 1.—The Geological Survey.

Transactions of the Nova Scotian Institute for 1896-97.—The Institute.

Bulletin of the Geographical Institute for Argentina.—The Institute.

Annals of the Museum of San Paullo, vol. 3.—The Museum.

Reports of the National Museum of Buenos Ayres, Tome 1, parts 1-5.— The Museum.

Fauna Hawaiiensis, parts 1 and 2, Occasional Papers of the Bishop Museum, Honolulu, vol. 1, part 1.—The Museum.

Symons's Monthly Meteorological Magazine.—The Editor.

British Almanac and Companion for 1898.-H. W. Tinne.

Kew Bulletin for 1898-99; Icones Plantarum for 1898-99.—The Director, Kew Gardens.

Proceedings of the International Conference of Zoology at Cambridge,— The Secretary of the Conference.

Contributions to the Ethnography of the East Indian Archipelago; The Maraes of the Society Islands.—Dr. Baessler. Journal of the Natural History Society of Zurich for 1898-99—The

Journal of the Natural History Society of Zurich for 1898-99.—The Society.

Various Entomological Pamphlets.—W. W. Froggatt.

Photographs of Mound-builders' Pottery.—H. N. Rus

Copy of the Haarlem Courier of July 18, 1843, containing Paragraph relating to New Zealand.—J. V. Breda.

Weather Charts for Japan for 1898.—The Central Observatory, Tokio, Japan.

Skeleton of Dinornis torosus, found in a cave at Nelson.—Purchased.

New Zealand and Chatham Island Bird Skins.—Purchased.

Two Spoon-bill Ducks.—General Hogge.

Blue-wattled Crow.—A. R. Weeks.

Duck-billed Platypus and Spiny Ant-eater.-Mrs. Calder.

Two Kiwi Eggs .- Canon Walsh.

Common Noddy, shot at Tauranga .- Mr. Stewart.

Collection of Moa Bones from the vicinity of Otorohanga; Human Bones.—L. Cussen.

Long-tailed Cuckoo.-E. G. Elliott.

North Island Weka .- P. Black.

New Zealand Shells .- Canon Walsh.

Cuttle-fish (Sepioteuthis).-Captain Johnson, s.s. Waiotahi.

Paryphanta busbyi.-R. H. Shakespear,

Australian Shells .- Mrs. C. T. Starkey.

Collection of Marine Shells from New Zealand; Fossil Shells from Tasmania.—Miss H. E. Clarke.

Large Centipede.—A. Nicholson.

Collection of Lizards, Fishes, and Shells, Land and Marine, from Rarotonga.—T. F. Cheeseman.

Lasiorhynchus,-Miss Stella Campbell.

Nest of Mason Wasp.—Mr. Hieatt

Gold Specimen from the Nonpareil Mine, Thames.—The Directors.

Rock Specimens from Coromandel.—H. D. M. Haszard.

Cerussite from Te Aroha.—A. R. Carnie.

Collection of Rocks from various parts of Germany.—The Freiburg Museum, in exchange.

Copper Ore from Whangaroa,-J. Bell

Collection of Ethnological Specimens, 132 in all, obtained on the Island of Rarotonga.—T. F. Cheeseman.

37 Ethnological Specimens from Rarotonga.—Presented by Rev. J. G. Hutchin, C. Kohn, Col. Gudgeon, Dr. G. Craig, W. Goodwin. Carved Ceremonial Axe-handles, with Axes, from the Island of Mangaia.— Rev. Mr. Cullen.

Maori Stone Axes.—P. Wood.

Fijian Fan.-Mrs. B. G. Coney.

Axe used in Norway in Squaring Timber.—Mrs. Eva Everssen.

Three Poi Balls .- Master Jones.

Maori Stone Chisel.-E. J. Brookes.

Collection Illustrating the Social and Domestic Life of the Maoris,— Obtained from the Natives of the Urewera District by Mr. Elsdon Best.

Two Fern-beaters.—A. Dyer.

Old Dish made in the year 1650.—Deposited by Mrs. Waite.

Elaborately Carved "Toki Hohoupu"; Bone and Greenstone Ornaments; 27 Sundry Articles.—Purchased.

Collection of Pottery made by the Mound-builders of North America.— J. D. Bushnell, St. Louis.

> LIST OF MEMBERS

FOR THE YEAR ENDING MARCH 31ST, 1900.

[HONORARY AND LIFE MEMBERS DISTINGUISHED THUS*.]

Adams, J., B.A., Thames Aickin, G., Auckland Aitken, W., Auckland Argall, W. H., Coromandel

Bagnall, L. J., Thames Bakewell, R. H., M.D., Auckland Ball, W. T., Auckland Bartley, E., Devonport Bates, T. L., Newcastle, N.S.W. Batger, J., Auckland Beere, D. M., C.E., Auckland Best, S. M., D. J. Auckland Boscawen, H., Auckland Brain, W. B., Auckland Brett, H., Auckland Brigham, J. M., F.R.G.S., F.I.S., Auckland

Auckland Broun, Captain T., F.E.S., Drury Brown, Prof. F. D., Auckland Brown, J., Epsom Buchanan, J., Auckland Buchanan, W., Devonport Buckland, A., Auckland Burgess, E. W., Devonport Burton, Colonel, Lake Takapuna Busck, A., Auckland

Cameron, R., Auckland
Campbell, H., Auckland
'Campbell, J. L., M.D., Auckland
Carrie, A. R., Auckland
Carrie, A. A., Auckland
Chambers, J., Parnell
Cheal, P. E., Auckland
Cheeseman, T. F., F. L.S., Auckland
Ching, T., Remuera
Cochrane, W. S., Auckland
Colbeck Cantain, Enson Colbeck, Captain, Epsom Combes, F. H., Auckland Cooper, C., Auckland Cooper, T., Auckland

Cowie, Right Rev. W. G., D.D., Bishop of Auckland

Cozens, G., Auckland Craig, E., Auckland Cussen, L., Hamilton

Dannefærd, S., Auckland Darby, P., Auckland Davies, Rev. H. S., North Dignan, P. L., Auckland Dufaur, E. T., Auckland Duthie, D. W., Auckland

Eastham, S., Devonport Edson, J., Devonport Edson, J., Devonport Egerton, Prof. C. W., Auckland Ewington, F. G., Auckland

Girdler, Dr., Auckland Goldie, D., Auckland Gorrie, W., Auckland

Haines, C. H., M.D., F.R.G.S., Auck-Haines, H., F.R.C.S., Auckland

Hardie, J., Auckland Hardie, J., Auckland Harding, S., C.E., Auckland Haszard, H. D. M., Thames Henton, J. S., Auckland Herbert, T., Parnell Hill, W. J., Auckland

Johnson, H.D., Te Aroha

Kenderdine, J., Auckland Kenderdine, J., Auckland Kidd, A., Auckland Kidd, J. S., Auckland Kirker, J., Auckland *Kitt, T. W., London

Lennox, J. M., Auckland Lennox, N. G., Sydney *Lennox, N. G., Sydney Leys, T. W., Auckland

Mackechnie, E. A., Auckland

Mackellar, E. D., M.D., Parnell Maclead, W. A., Hobart Macleod, W. A., Hobart Main, Captain G., Thames Mair, R., Whangarei Mair, Major W. G., Auckland Major, Rev. H. D. A., Waiototara Makgill, Dr., Onehunga Marshall, P., F.G.S., Auckland Martin, J., F.G.S., Auckland Masefield, T.T., Auckland Masefield, T.T., Auckland McCullough, Hon. W., Auckland McDowell, W. C., M., Auckland McLaurin, J. S., Auckland Millert, F. V., Chesea Millert, F. V., Chesea Millert, A., Mackland Millert, P. V., Chesea Moody, T. P., Hikurangi Morton, H. B., Auckland Montgomery, A., Auckland Morrin, T., Auckland Morrin, T., Auckland Morrin, T., Auckland Munro, G. C., Sandwich Islands Murdoeb, D. L., Auckland Munro, G. C., Sandwich Islands Murdoeb, D. L., Auckland Murdoeb, D. L., Auckland

E

Nathan, L. D., Auckland

Pabst, Dr., Auckland
Park, Jas., F.G.S., Auckland
Patterson, G. W. S., Auckland
Peacock, T., Auckland
Petrie, D., F.L.S., Auckland
Philcox, W., Devonport
Pinfold, Rev. J. T., Parnell
Pond, J. A., Auckland
Potter, A. T., Whangarei
Povey, F. J., Auckland
Purchas, Rev. A. G., M.R.C.S.,
Auckland
Pyeroft, A. T., Christchurch

Reid, J., Auckland

Roberton, E., M.D., Auckland Rose, R., Auckland *Russell, T., C.M.G., London

Seegner, C., Auckland Segar, Prof. H. W., Auckland Shakespear, R. H., Little Barrier Shaw, H., Auckland Smith, H. G. S., Auckland Smith, B. F., Fla.G.S., Wellington Smith, T. H., Auckland Steel, T., Sydney Stewart, J., C.E., Auckland Streeter, S. C., Auckland

Talbot-Tubbs, Prof. H. A. Auckland
Thomas, Prof. A. P. W., F.L.S.,
Auckland
Tibbs, J. W., Auckland
*Tinne, H., London
Tinne, T. F. S., London

Upton, J. H., Auckland Urquhart, A. T., Karaka

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